Claims

What is claimed is:

1. A method of instructing a user to read musical notation through interaction with a graphical user interface and an input device coupled to a drumpad, comprising the steps of:

a) generating the graphical user interface, having a first position, including a virtual drum set, having a plurality of pads, each pad having a corresponding pad on the input drumpad;

b) incorporating a music file into the graphical user interface, wherein the music file contains data corresponding to an arrangement of at least a first and a second musical note in sequence, having a rhythmic pattern;

c) directing a first game object, representing the first musical note in the arrangement, upward, in a first substantially straight trajectory, toward a first pad on the virtual drumpad, corresponding to the first musical note, such that the first game object will experience a first collision with the first pad;

d) directing a second game object, representing the second musical note in the arrangement, upward, in a second substantially straight trajectory, toward a second pad on the virtual drumpad, corresponding to the second musical note, such that the second game object will experience a second collision with the second bar or pad, according to the rhythmic pattern of the arrangement; and

e) awarding a value to the user based upon the user striking the corresponding input drumpad approximately simultaneously with the first and second collisions.

2. The method of instructing of claim 1, further comprising the steps of:

a) rotating the interface to a final position, approximately ninety (90) degrees counterclockwise, once a predetermined threshold of user performance has been met, such that the virtual drumpad is positioned substantially on a left side of the interface, and the first and second game objects move along the first and second substantially straight trajectories toward the virtual drumpad; and

b) introducing a series of visible staff lines defining spaces, where the lines and spaces correspond to the straight trajectories along which the game objects travel toward the virtual drumpad, such that the game objects travel along either the lines or the spaces, until colliding with the virtual drumpad.

3. The method of claim 2, further comprising the step of morphing the game objects into classical musical notation.

4. A method of instructing a user to read musical notation through interaction with a graphical user interface and an input drumpad, comprising the steps of:

a) generating the graphical user interface, having a first position, including a virtual drumpad positioned substantially at a top portion of the interface, having a plurality of pads, each pad having a corresponding pad on the input drumpad;

b) incorporating a music file into the graphical user interface, wherein the music file contains data corresponding to an arrangement of a plurality of musical notes in sequence, having a rhythmic pattern, each note being represented by a game object;

c) directing the game objects upward, in substantially straight trajectories, toward the virtual drumpad corresponding to the musical notes;

keys on the virtual drumpad corresponding to the musical notes;

d) colliding the game objects with the corresponding keys according to the rhythmic pattern of the arrangement;

e) awarding a value to the user based upon the user striking the corresponding key on the input drumpad approximately simultaneously with the collisions

f) rotating the interface to a second position, approximately ninety (90) degrees counterclockwise, once a predetermined threshold of user performance has been met, such that the virtual drumpad is positioned substantially on a left side of the interface, and the game objects continue to move along the substantially straight trajectories toward the virtual drumpad.

5. The method of claim 4, further comprising the step of introducing a series of visible staff lines defining spaces, where the staff lines and spaces correspond to the straight trajectories along which the game objects travel toward the virtual drumpad, such that the game objects travel along either the staff lines or the spaces, until colliding with the virtual drumpad at the corresponding key.

6. A method of playing a video game, comprising:

a) providing a standard drum set having at least one drum set component;

b) attaching an electrical pick-up on each of the drum set components;

c) providing a processor and a functionally coupled display monitor which are electrically responsive to the electrical pick-ups;

d) displaying a game grid having a similarity to a musical staff with objects, which are moving along the musical staff, that will change appearance when the drum set

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component is struck at an appropriate moment.

7.   The method of claim 6, wherein the objects change shapes from caterpillars to butterflies.

8.   The method of claim 7, wherein the pick-ups are electrical transducers.

9.   The method of claim 8, wherein the electrical transducers will create electrical signals in proportion to certain parameters of physical characteristics occurring to a drum set piece after it has been struck.

10. The method of claim 9, wherein the musical staff orientation can be changed from a vertical orientation to a horizontal orientation and any degree of tilt there between.

15. A system for instructing a user to read musical notation, comprising:

        a musical instrument;

        a processor coupled to the musical instrument;

        a display, functionally coupled to the processor, configured to display a game field, indicative of a musical staff; and

        a game object, displayed on the game field, configured to change appearance when the musical instrument is played.

16. The system of claim 15, wherein the game field is a musical staff having musical notation, placed thereon, selected from the group consisting of: bar lines, staff lines, bass clef, treble clef, dynamics, dynamic variance, flow direction, key signature, performance style, special ending, pedal markings, tempo, tempo variance, time signature, accent, slur, dotted, double-dotted, grace, staccato, tenuto, tide, sharp, flat, natural, double-sharp, double flat, roll, flam, drag, and hand information.

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17. The system of claim 16, wherein the musical notation comprises a staff line and the game object moves substantially parallel to the staff line.

18. The system of claim 15, wherein the game object changes appearance only when a sound appropriate to the displayed game field and game object is played.

19. The system of claim 15, wherein the musical instrument emits a sound only when a note appropriate to the displayed game field and game object is played.

20. The system of claim 15, wherein the game object changes only when the game object reaches a target zone and a sound appropriate to the displayed game field and game object is played.

21. The system of claim 15, wherein the musical instrument is a drum set.

22. The system of claim 15, wherein the object is illustrated as an insect.

23. The system of claim 15, further comprising a sensor coupled to the musical instrument and the processor, configured to provide sound quality information from the musical instrument to the processor.

24. The system of claim 15, wherein the game object is a musical note.

25. The system of claim 15, wherein a negative response is provided when a sound not appropriate to the displayed game field and game object is played.

26. The system of claim 15, wherein a difficulty of play is variable.

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27. The system of claim 17, wherein the staff line is initially in a substantially vertical orientation and over time rotates to a substantially horizontal orientation.

28. A software module for instructing a user to read musical notation, comprising:

a processor module for interacting with a processor;

a receiving module, linked to the processor module, configured to receive digital signals indicative of musical information; and

a display module, linked to the processor module, configured to enable display of a game field, indicative of a musical staff, and a game object, configured to change appearance when the receiving module provides a digital signal indicative of the playing of a musical instrument.

29. The module of claim 28, wherein the display module is configured to change the game field over time from a substantially vertical orientation to a substantially horizontal orientation.

30. The module of claim 28, wherein the display module is configured to change the appearance of the game object only on when the digital signal from the receiving module is appropriate to the relation between the game field and the game object.

31. The module of claim 28, wherein the display module is configured to display a staff line as part of the game field and to move the display of the game object substantially parallel to the staff line.

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